Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 5. (Canceled)

6. (Currently amended) A computer readable storage medium including computer instructions executable on a computer for carrying out a method of

a) performing an initial run of a program ~~for~~ placing orders for products in a computer system, wherein each order is represented by an order object and monitoring the program to determine a class and a creator for each order object;

b) determining a lowest cost property <u>from a plurality of alternative properties</u> for each of the order objects;

c) determining a correlation between the property and the class and creator of each order object, and expressing the correlation as a correlation table that relates   class and creator to the lowest cost property during the initial run; and

d) providing subsequent order objects comprising properties based on the correlation table using class and creator.

7. (Previously presented) The computer readable medium as set forth in claim 6, wherein the computer instructions further enable the computer to determine the lowest cost property by minimizing total cost of interaction among components during the initial partial run of said program.

8. (Previously presented)The computer readable medium as set forth in claim 6, wherein said characterization information of an object comprises at least one of said object's class,

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classification of said object's creator object, and a code identification of said object's creation site.

9. (Previously presented)The computer readable medium as set forth in claim 6, wherein said alternative properties comprise a string representation selected from ASCII, EBCDIC, and UNICODE.

10. (Previously presented) The computer readable medium as set forth in claim 6, wherein said alternative properties comprise a data structure selected from hash table, tree, and compressed data structures.

11. (Currently amended) A computer system with a computer program that, when being loaded and executed, controls the computer system such that it carries out a method comprising steps of:

a) instrumenting an initial run of said program to determine characterization information about each of ~~said~~ a plurality of objects to be used at runtime to recognize groups of objects efficiently, as the objects are created, in repeated runs of ~~an~~ object-oriented programs;

b) determining a lowest cost among a plurality of ~~one of said~~ potential alternative properties for one of said objects;

c) determining a correlation between ~~said~~ a lowest cost property and said characterization information associated with the one object;

d) expressing the correlation as an allocation strategy; and

e) implementing said allocation strategy to select among the alternative properties for an object subsequently created during the at least partial run of said program based upon characterization information about the subsequently created object; and

f) producing a subsequent set of objects comprising the characterization information selected in step e).

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12. (Currently amended) ~~The system as set forth in claim 11,~~ A computer system with a computer program that, when being loaded and executed, controls the computer system such that it carries out a method comprising steps of:

 a) instrumenting an initial run of said computer program to determine characterization information about each of a plurality of objects to be used at runtime to recognize groups of objects efficiently, as the objects are created, in repeated runs of an object-oriented programs;

 b) determining a lowest cost property among a plurality of potential alternative properties for one of said objects;

 c) determining a correlation between a lowest cost property and said characterization information associated with the one object;

 d) expressing the correlation as an allocation strategy; and

 e) implementing said allocation strategy to select among the alternative properties for an object subsequently created during the at least partial run of said program based upon characterization information about the subsequently created object; and

 f) producing a subsequent set of objects comprising the characterization information selected in step e);

 wherein the determining of [[a]] the lowest cost property in step (b) is carried out by minimizing total cost of interaction among components during the initial run of said program.

13. (Currently amended) The system as set forth in claim 11,

 wherein said characterization information of the object comprises at least one of ~~said~~ an object's class, classification of said object's creator object, and a code identification of said object's creation site.

14. (Currently amended) The system as set forth in claim 11, wherein said potential alternative properties comprise a string representation selected from ASCII, EBCDIC, and UNICODE.

15. (Currently amended) The system as set forth in claim 11, wherein said <u>potential</u> alternative properties comprise a data structure selected from hash table, tree, and compressed data structures.

16. (Previously presented) The system as set forth in claim 13 wherein expressing the correlation comprises generating an allocation strategy table that relates the object's class and its creator to the determined lowest cost property during the initial run.

17. (Currently amended) The system as set forth in claim 16 wherein the allocation strategy comprises allocating each instance of the object's class to a same machine as its creator if each instance of the ~~object~~ <u>object's</u> class has been partitioned onto a machine of its creator.

18. (Currently amended) The system as set forth in claim 17 further comprising linking each instance of the ~~object~~ <u>object's</u> class with its creator such that the linked instance of said ~~object~~ <u>object's</u> class is moved if the creator is moved.

19. (Previously presented) A method for placing orders for products against inventory, said method comprising:

a) performing an initial run of a program for placing orders for products in a computer system, wherein each order is represented by an order object and monitoring the program to determine a class and a creator for each order object;

b) determining a lowest cost property for each of the order objects;

c) determining a correlation between the property and the class and creator of each order object, and expressing the correlation as a correlation table that relates class and creator to the lowest cost property during the initial run; and

d) providing subsequent order objects comprising properties based on the correlation table using class and creator.

20. (Previously presented) The method of claim 19 wherein the step of determining a lowest cost property comprises determining whether the lowest cost property is delivery from Warehouse 1 or Warehouse 2.

21. (Previously presented) The method of claim 19 wherein the step of determining characterization information comprises determining whether the class is large or small and whether the creator is terminal 1 or terminal 2.

22. (Previously presented) The method of claim 19 further comprising labeling each instance of every class with the machine to which the class was initially allocated.